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EDUCATION IN JAPAN.

THE Japanese people have begun a new civilization, on the principle that "education is the basis of all progress." Waking up from the lethargy of ages, the "Land of the Rising Sun" asks for the unshorn beams of the sun of knowledge. Seeking and desiring light for the thirty-five millions of her people, Dai Nipon has given new significance to her proud name. A glance at the old education and a sketch of the new, may not be uninteresting.

In order to get even a faint idea of Japanese culture and education, we must glance backward through many centuries. Japan received from China her alphabets, her literature, her science, and indeed almost her entire literary property and her civilization. One of the most interesting and sometimes the most difficult studies to a resident in Japan, is to distinguish between the pure Japanese and the Chinese expressions and customs. Certain Japanese purists, who desire to disclaim as much as possible their indebtedness to China, assert that Japan anciently possessed a language and literature of her own. An alphabet called the Kami or godletters, they assert, was formerly used by the ancient sages, which was given and taught them by the gods. It is also asserted that many of the ancient burial-stones in the templeyards, in the sacred city of Maico, contain inscriptions in

this character. This alphabet has two forms, one consisting entirely of straight lines and small circles, the other of curved lines, and evidently used as the script or running hand. The writer has seen this alphabet printed in a Japanese book, which is written to disprove the popular idea concerning the "god-letters," and to show that they were brought from Corea at a comparatively late date, several centuries after the Christian era, and that the story of their having any sacred character is a fabrication. We have looked carefully in many ancient temples and in many old burial-grounds and other places in Japan, but have never seen any inscriptions in this character, though Sanscrit inscriptions are found in nearly every cemetery.

"The first knowledge of Chinese writing was carried to Japan by a prince of Corea in the year 284 of our era, and then, immediately after, the tutor to that prince, a Chinese named Wang Zin, having been invited, the Japanese courtiers applied themselves to the study of the Chinese language and literature." In the sixth century, the missionaries of Shaka, having overrun nearly all Eastern Asia, even to Corea, crossed over to Japan, and spread the doctrines of Buddhism. "Then every Japanese in polished society, besides being instructed in his mother tongue, received instruction in Chinese also; consequently read Chinese books of morality, and aimed at being able to read and write a

letter in Chinese.

"The original pronunciation of the Chinese degenerated early, and new dialects of it sprang up which were no longer intelligible to the Chinese of the continent; but notwithstanding that, the Japanese remained able, by means of the Chinese writing, to interchange ideas not only with the Chinese, but with all the peoples of Asia that write Chinese. The Chinese written language has become the language of science in Japan. It will long remain such, notwithstanding the influence which the civilization of the West will more and more exert there."

It will thus be seen that the Chinese language and thought became imbedded in and greatly assimilated to the

Japanese. For centuries it has been the sum of knowledge and culture to the educated classes. True it is, that the Dutch language was studied to a considerable extent, but it was "the monopoly of the fraternity of interpreters and a few literary men, who used this knowledge as a bridge, over which the skill of the West was imported and spread over the country by means of Chinese or Japanese translations."2 The Dutch language was even for a time the court language of the country, and many Dutch words have become vernacular. From time to time the student is amused and surprised to find words which he may have casually heard along the Raritan or the Hudson, or read on the sign-boards of Amsterdam turning up in Japanese speech; while the names of chemicals, merchandize, etc., of Dutch origin, are too numerous to detail. We have before us the catalogues of the schools and studies of the province of Yetsizen or Echizen, the foreign studies of which the writer has the honor of directing. There are three grades of school, corresponding to our primary, grammar and high school. The Japanese boy is supposed to begin schooling at five or six years of age. He first learns the kata and hira kana, Japanese alphabets, which are respectively the text and running hand. Each consists of forty-seven syllables, and though spoken of by the Japanese as "our kana," are altered or abbreviated from the Chinese. The Japanese alphabet, like the Chinese characters, is a syllaban. The hope of Japan spends five years in the Sho Gaku. During the first year he learns to read in their order, "Small Learning"-the moral duties of man: Confucius' Four Books of Morals; the Three-Character Book of Morals; the Book of Filial Duties; the Book of Great Lineage-ancestry of the Mikado: and the Entrance to Knowledge-duties of cleanliness, obedience, etc. By way of commentary, we may add, that the astonishingly polite urchins of Japan, returning home from school with their ink-bedaubed faces and bowing very low, as they invariably do, to their foreign teacher, obey the precepts of obedience rather better than those of the virtue usually supposed to be next to godliness.

All these books are written in very easy Chinese characters. After being examined, the scholar begins his second year, the studies of which are: rudimentary Geography, a primer written in euphony; the writing of small Chinese characters; learning the names of all the Emperors of Japan, the names of the large cities, provinces and their local divisions, how to read the proclamations of the Imperial Government, the names of and written characters for familiar objects; learning to write the characters of numerals, points of the compass, the seasons, names of countries, chronology, names of years, etc. It will be noticed that in the first year reading only is pursued; in the second, the books and writing are to be studied. To go into a Japanese school-room, while the boys are learning their lessons, (study at home is a new idea in Japan) reminds one of the Congress at Washington or an hour on 'Change.

Our Jap, during the third year, learns the four fundamental rules of arithmetic and the use of the abacus; and here the mathematical education of most Japanese ends. He also reads the Book of Heroes—a reader containing accounts of model men and women, virtuous and noble actions, etc. The third, fourth and fifth years are repetitions in kind of the first and second. Much time is devoted to the study of etiquette, how to walk, bow, visit, talk, etc. In this department we must confess the native of Japan a peer to that of any other country. A peculiar fact which the American teacher in Japan notices, is this, that the keeping of discipline, which in America requires so much time, nerve-power and will, is entirely unnecessary in Japan, the boys being orderly and quiet to a remarkable degree.

The next school into which the pupil is now graduated, is the Middle School. It would be tedious to detail all the studies, but in substance, they are simply an advance in the same line of the studies of the small school. The scholars read the History of China, the Book of Rhetoric, or Composition in Chinese; a brief History of Japan, and a large "Book of Japanese Strategy," containing remarkable feats in war, narratives of heroes, etc. In writing, they learn the Chinese small text, and how to write private and official letters, both original and after models. In arithmetic, they

again drill in the four fundamental rules and learn to solve problems, and to count large numerical quantities. They also read a brief universal geography, and study quite thoroughly the topography of Japan. The time occupied to complete the studies of the Middle school, is three years; during which time the pupil also receives initiatory lessons

in fencing, wrestling and riding.

Young Japan is now in his sixteenth or eighteenth year, and enters the Dai Gako, or High School. Here he reads several histories of Japan; the first is from the Golden Age, and is to be brought down until "within the memory of men now living." The second is the history of ancient Japan, from the first Emperor, until the middle ages; and the third, written in very fine style, takes up the history of Japan at the middle ages, and continues it until the time of Ivevas, in the early part of the 17th century. In arithmetic, vulgar and decimal fractions, the rule of three, involution, evolution, and progression are taught, together with a little algebra. Daily exercise in fencing and wrestling, and a monthly lesson on horesback, hitherto "completed" the education of the average educated Japanese. While many, by private study afterwards, far exceeded their school studies, the majority, especially in mathematics, never reached the maximum presented above.

Thus it will be seen that the entire education, as we out of compliment call it, of the Japanese boy was simply the knowledge of how to read and write Chinese, a few scraps of knowledge concerning other countries, the history of Japan and China only, a little of the simplest mathematics, and a pretty heavy dose of atheistic morals,-no education in its radical sense, only the training of the memory and the storing of the mind with a few facts and many precepts. We have every reason to believe that the state of education in Echizen, previous to the coming of a foreign instructor, was exactly the same as that in the best provinces of Japan. It must also be remembered that in many of the provinces, nay, in most of them, no government school existed, the few there were, being private; and further, none but the sons of the Samurai—the literary military class of Japan—were permitted to attend. Considering these facts, it is not surprising that although nearly every inhabitant of the cities in Japan can calculate on the abacus, can read and write the hira kana and kata kana, and read the government proclamations, yet concerning the facts and methods of the classified sciences, the normal Japanese was like a child that had not yet picked a single pebble from the boundless shore.

WILLIAM E. GRIFFIS.

THE SONS OF PESTALOZZI.

FROM THE GERMAN.

CHAPTER XX.

WHEN Theodore Waldner, in consequence of his conversation with Mechthild de Fernau, had purchased the French novel "Le Mutilé," he had taken the first opportunity to ask his friend Bechtold about the meaning of the title. latter had rendered the title "Der Verstümmelte," and at the same time had placed his own French dictionary at Theodore's disposition. Waldner was determined to overcome all the difficulties which his defective knowledge of the French language opposed to his progress. He soon found himself deeply interested in the tale. Pope Sixtus V. who, as a boy, had tended a herd of swine, and subsequently had become a priest, a bishop, a cardinal, and finally the bearer of the treble crown, proceeded with merciless severity against all evil doers. But hardly less was his cruelty against those who denounced his procedure as too severe, and attacked him by word of mouth or by the pen. One of these latter, a highly gifted poet, and the hero of the tale, was punished in the most fiendish manner, by cutting out his tongue, and chopping off his hands, thus depriving him of the organs to utter, and even to write down his ideas. His genius was still creating the most affecting poems, the most beautiful images; he still conceived them in the most expressive language; but they had no existence without him. The sky, the waves, were his parchment on which he wrote; but no eye except his own could read these characters!

"This is my own life," cried Theodore, "the eternal help-lessness of my mutilated mind. But that organism that God has preserved for me, in his mercy, and which he has given me anew, I will use to the best of my ability! There was a time when I was like that poet. I had no hands, and no tongue, for I did not know their true purpose. But now that I have wings with which to fly, must I not use them to soar high in the infinite space of thought? O, give me power to learn, to learn—"

Fritz Bechtold found Theodore absorbed in these meditations. What a comfort for him to lav his soul open before a being that fully understood him! Bechtold was the son of a poor artisan. Brought up to the trade of a locksmith, he could not resist the charms of intellectual training, the taste for which he had imbibed in evening schools. By teaching others in the elements of knowledge at an early time of his life, he acquired the means to enlarge his own. It soon appeared that he had unusual talents for the art of teaching. His language was determined and brief, his bearing manly and compact. The lineaments of his features had a sharp and significant cut; in his very eyes there was an expression that filled his scholars with awe, and they willingly yielded to him the whole of their mental capacities. His hair he always kept short and close. He himself, goodhumoredly, compared its stiffness with the seal-skin of a traveling trunk. But his heart was soft and capable of a depth of feeling which would scarcely have been expected in one so hardy and rugged.

The tea-bell was calling the two friends down to the large hall in the basement of the house. When they were passing through the corridors, they met with Gertrude. The lights were burning too dim to notice the sudden flush of crimson that appeared on Bechtold's face. Thus it was always when he met with Gertrude. If in such cases Waldner was with him, Bechtold could not help observing the expression of infinite tenderness with which Gertrude's eyes rested on his friend. Then he felt as if, on a sudden, the blood were curdling in the chambers of his heart. But his attachment

to Waldner was never affected by it. In this heart envy

and jealousy could never dwell.

Gertrude, who did not take her meals with the boarders, seemed to have some business in the third story, in which the sick-rooms and the "Carcer" were situated. She noticed the janitor taking supper up to Count Linsingen, "the prisoner." In one of the sick-rooms she found Mrs. Bröge duly watching at the bedside of little Horace Gordon. Gertrude comforted the patient with soothing words, and then walked up to the door of the "Carcer." She tried the lock, and found it all right. Having finished her round of inspection, she walked down to the second story, and was just passing a bend in the lower flight of stairs, when she suddenly found herself opposite to Dr. Staudner, who on his part was ascending the stairs to pay another visit in the sick-room.

"What in the world has brought your displeasure upon me, Miss Gertrude?"

These words, with which he addressed Gertrude in a tone of gallantry, were accompanied with a sinister leer of his eyes, which looked sparkling over his blue glasses. He had planted himself, with cynical indifference, squarely in Gertrude's way, who in her anguish did not even attempt an answer to his question, but tried to pass the hated man by turning towards the railing. But with impudent familiarity he barred her passage, and continued:

"Please, Miss Gertrude, let us make a truce, or rather establish peace, and a peace for ever, if possible. You know, I love you! You have made a convert of me. I am de-

termined to take a wife, and none but you-"

Gertrude, when she was baffled in her efforts to reach the lower story, saw that nothing was left to her but a retreat. She swiftly slipped back to the second story, where she entered the first room she found open. Closing the door behind her, she secured it by a bolt, so as to make it impossible for her pursuer to follow her. Not till she heard Staudner's steps on the third story, could she collect herself sufficiently to examine the room which had given protection to her. She found that she was in Dr. Wehrmann's room, and her heart throbbed violently when she bethought her-

self of the possibility that somebody might notice her passing out of this room. Suddenly she heard a peculiar noise at the window-panes, very much as if a bird was flying against the glass. It was dark in the room, but a lantern in the yard afforded light enough to see that some white object was dangling outside the window. Remembering that the "Carcer" was just over Wehrmann's room, she had not the slightest doubt that a contraband letter had been let down from the railed window of the "Carcer," to go either into this room, or into the yard. Noiselessly she opened the window, and saw that the cord to which the letter was fastened, was repeatedly pulled from above, evidently because the window cornices had interfered with the descent of the paper. When, at length, the paper had reached the level ground of the yard, she wondered who would take care of the letter. But directly the thought struck her that she ought to prevent this. Pulling up the cord, she boldly seized the letter, detached it, and, after closing the window, left the room without delay.

She reached her own room in the basement without being noticed. Here she read the direction of the letter, which was addressed to "Miss Thekla Federer," the ridingmaster's daughter. Slipping the letter into her pocket, she concluded to watch the further development of the drama. For this purpose she immediately repaired to an unoccupied room of the house, from the window of which she could conveniently see what was going on in the yard without being noticed herself. She saw that the cord was still hanging down from the "Carcer," from which Linsingen could not see anything going on in the yard, since the window was secured with those wooden screens, which prevented all communication with the outside without excluding light and air. After a little while, a little girl, one of Bröge's daughters, stealthily approached the cord, and seemed not a little surprised that nothing was attached to it. At the same time Gertrude heard the steps of the boarders, returning from their meal. This induced her to repair to her uncle's room. Mrs. Nesselborn had sent word that she would be at the theatre that evening. Gertrude considered this a very lucky accident, since her uncle, at least till 10 o'clock, would be free from all interference on the part of his wife. She concluded that an appeal to her uncle's pedagogic conscience would rouse him from his lethargy. In this she was not disappointed. Nesselborn, after hearing her report of all that had happened, including Staudner's coarse importunities, impatiently seized and opened the captured letter. It contained an appointment of Count Linsingen with the riding-master's daughter at half-past ten o'clock, when he would find means to slip from the carcer.

Nesselborn was thunderstruck. Gertrude proposed that the premeditated attempt should be allowed to go on, in order to entrap and bring to punishment all persons concerned in it. She did not doubt that Bröge would open the carcer at the appointed hour, and thought it best to require Waldner's and Bechtold's assistance. Both would have to watch Bröge's movements, and by a preconcerted sign might notify her uncle when Linsingen would leave the carcer. Bröge, with his whole family, ought then to receive immediate notice to leave.

Mr. Nesselborn approved of the plan, and directly proceeded to Waldner's room in which he found both friends reading the "French novel." He could not help intimating his displeasure at that kind of reading, but did not dwell long on the subject. He made Waldner and Bechtold acquainted with all that had happened in the evening, and both cheerfully promised to assist him in exposing the evildoers.

Everything came to pass "like a well-calculated eclipse," as Göthe's Alba says. Mrs. Nesselborn had returned at 10 o'clock, and retired to her room. She was just going to rest, when, on a sudden, at half-past 10 o'clock she was startled by a loud and confused noise. She could distinctly recognize the voices of Bröge, of his wife, of her own husband, and of Bechtold and Waldner. Since she was partly undressed, it took some time before she could appear at the scene of action, and when she arrived at length, she found only "accomplished facts." Already the dismissal of the whole Bröge family had been decreed and formally pronounced. Linsingen was again secured behind bolts and bars, and had been sentenced to "prolonged captivity."

The riding-master was to be notified next morning that his services were no longer required. Mrs. Nesselborn did not think it advisable to interfere for the present, but suspended her own action in the matter till the next morning. Waldner and Bechtold repaired to the sick-room, where they had volunteered to watch at little Gordon's bedside, and the usual quiet was once more restored to the school.

THE USE AND ABUSE OF THE ADJECTIVE.

An adjective is known by its making sense with the word thing," was an oft and forcible pedagogical precept during our youthful struggles to acquire the mysteries of the English language as expounded by Lindley Murray; and this simple formula, with the emphatic addition of a smart cuff on the ear, enabled us then to recover some of our faux pas in tripping through a sentence. This judicious formula, so convenient then, would be no less so at all periods. "To make sense with the word thing," if borne in mind, would be an effectual safeguard against the perverted and incongruous use of adjectives, which are so frequently found to have little or no sense with the object they describe.

Thus I propose to enter the lists as the unworthy champion of the fairest damsels in the English language. I speak of them in the gentler gender, because the one end and aim of their existence is matrimonial. They exist not per se; for, until they are married to some sturdy noun, they are nonentities. I shall devote myself to the benevolent task of rescuing these peerless ladies from the hands of ogres who torture, harridans who overwork, and cruel guardians who incongruously wed them—marrying the young to the old and ugly, the stately and proud to the mean and despicable. In cases where I find some fair vestal wedded to a greasy churl—as in the instances of a "beautiful" round of beef, or a "splendid" mutton-chop—I shall decree a divorce a mensal et thoro. I shall order, if not a judicial, at least a judicious separation between "frightful" murders, which inspire not

fright but horror: "terrible" catastrophies, which inspire not terror but awe, and "fearful" cases of destitution, which inspire not fear but indignation and pity. I shall put an end, moreover, to all unions in which sisters are wedded to the same noun. Polygamous marriages are permissible, for language came from the East, bringing Eastern customs with it. But polygamous marriages are not permissible where there is blood-relationship between the wives. Yet we read of thefts which are not only "bold" but "daring," of accidents which are not only "fatal" but "serious," of faces which are not only "ill-looking" but have a "sinister expression," and of poverty-stricken prisoners who are not only "cadaverous" but "thin" and "pale," and even "emaciated" into the bargain-whereby we are favored with a glimpse of that strangely-redundant being who sometimes figures in our police reports, as a "pale, thin, cadaverous-looking individual who wore a very emaciated appearance."

Having glanced at some of the abuses to which this luckless part of speech is liable, let us now turn to its uses, for in that way we may learn enough of its nature to avoid illtreating it in future. First, as to its nature. The purpose of language, as we all know, is to transfer ideas from mind to mind. Ideas are mental pictures—it may be of outward objects, it may be of conceptions conjured up in the mind itself. Let us, for the sake of simplicity, confine ourselves to those ideas which are projected upon the mind by outward objects. Now, all outward objects have names—are

expressed in language by nouns.

If, strolling on a croquet-ground, I see a ball, I transfer the idea thus photographed upon my mind to that of another by the noun "ball." But a ball, like all other objects, does not merely exist; it has modes or manners of existing. It may be in motion or at rest, in which case we add to the noun a verb, saying the ball is "standing" or "rolling." Motion, again, has its modes or manners. The ball may be rolling "swiftly," or "slowly," or "crookedly;" in which case we add an adverb. But, putting aside all question of action and passion, of doing or being done to, let us look upon the ball as an object simply.

Even lying at rest it has its modes or manners of being; and here we bring in our adjective. The modes of a ball, as of all other objects, may be divided into two classes: essential or accidental. The essential mode of a ball is that it shall be round; if it is not round, it is not a ball. But, being round, it may be either made of wood or ivory, it may be red, or green, or blue, it may be polished or unpolished. All these are accidental modes-modes, that is, not essential to its existence as a ball-and, if we want to express these, we have to call in the aid of an adjective. So that we come to this: that, while a noun describes an object in its essential mode, a conjoined adjective describes it in its accidental modes, expressing in point of fact some special characteristic which is not included in the noun, or name. We may therefore speak of a "hard" ball, and a "round" flint, because hardness is not included in the noun ball, nor roundness in the noun flint. But we may not speak of a "round" ball and a "hard" flint, because roundness is included in the noun ball, and hardness in the noun flint. Least of all, are we to use adjectives for which there is no corresponding characteristic mode in the object sought to be described. So that we are entirely debarred from speaking of "beautiful" rounds of beef, and of "splendid" mutton-chops, because "beauty" is not a characteristic of beef, nor "splendor" of mutton-chops.

We have now, if I have made myself clear, got at the nature of adjectives. Let us look next at their capabilities. In their primary use they assist nouns in the description of objects. But they are capable of doing more than this; they may be so used as to give character and color, not to nouns alone, but to whole word-pictures. They may be made the foliage of the otherwise bare trees of literature, the rills among its mountains, the flowers that nestle among its undergrowth. For proof thereof, listen:

"Now fades the landscape on the sight, And all the air a stillness holds, Save where the beetle wheels his flight, And tinklings lull the distant folds."

This is not the stanza as Gray wrote it; I have deprived it of

four of its adjectives. See what it grows into when these are added:

"Now fades the glimmering landscape on the sight, And all the air a solemn stillness holds, Save where the beetle wheels his droning flight, And drowsy tinklings lull the distant folds."

The adjective "glimmering" has thrown twilight upon the picture; the adjective "solemn" has subdued its gayety; while the adjectives "droning" and "drowsy" almost lull one into pleasing slumber.

There is a certain power in adjectives, too, which may be called their noun-power—a power, that is, which not only gives tone and color to the picture, but adds distinct ideas to it. Gray, for instance—I take him again, having the book in my hand—sings to us of

"The breezy call of incense-breathing morn."

Neither "breezy" nor "incense-breathing" are adjectives which it is absolutely necessary to use. They can scarcely be said to express other than very remote characteristics of the objects which they describe. Yet see what they add to the picture. They introduce both the breeze and the perfume of the flowers with all the effect of nouns. See, again, how good old Bishop Hall takes advantage of this nounpower of the adjective. "How sweetly," he says, "doth music sound in the night season! In the daytime it would not, could not, so much affect the ear; all harmonious sounds are advanced by a silent darkness." Here, as we see, the adjective "silent" does not merely qualify the noun "darkness;" it adds to darkness silence—adds, in fact, another noun.

Another subtle power which the adjective possesses is that of giving a glimpse of something exceedingly beautiful, entirely apart from the picture it is employed in painting. We have an example in Milton, where he speaks of philosophy as being "a perpetual feast of nectared sweets;" what would otherwise be an ordinary picture is at once suffused with a godlike glow from Olympus, and made luxurious with reminiscences of the dimpled smiles of Hebe.

But, to pursue this part of the subject no further, let us

turn from the nature and characteristics to the employment of the adjective-the proper method of using it in composition. It is very difficult to lay down rules in such a matter; for the use of adjectives, as we have seen, depends very much upon the purpose we have in employing them. Take the noun violet for instance. We all understand what that means, and there seems to be no need of an adjective. Nor is there, if we are speaking of a violet without relation to any other object or influence. So, when Shakespeare is speaking of the different kinds of flowers that grow in the hedgerows, he uses the noun simply; but when he is describing the effects of a breeze playing across a flowery bank, he speaks of the "nodding" violet; when describing a posy of mingled colors, he speaks of the "blue" violet; when describing the sweet odors of the morn, he speaks of the "perfumed" violet. While, therefore, as a general rule, it is improper to describe by adjective that which is already included in the noun, exquisite effects may sometimes be produced by pursuing the opposite course, as in this instance from "Love's Labor's Lost:"

"Daisies pied, and violets blue,
And lady-smocks all stiver-white,
And cuckoo-buds of yellow hue,
Do paint the meadows with delight."

Or in this, from "Midsummer-Night's Dream:"

"You spotted snakes with double tongue,
Thorny hedgehogs be not seen;
Newts and blind-worms do no wrong,
Come not near our Fairy Queen,
Weaving spiders come not here;
Hence, you long-legged spinners, hence,
Beetles black, approach not near;
Worm nor snail do no offence."

But in neither of these cases was it the poet's intention to limit himself to description of the objects introduced. His purpose was to paint a given kind of pictures for the mind; and he does so by introducing in brilliant confusion a number of dissimilar objects, whose differential characteristics he hits off with pre-Raphaelite accuracy.

But, while adjectives may be thus redundantly used for special kinds of word-painting, they are by no means to be so used in ordinary word-painting. Here the object is terseness—a crowding together of the images in as small a space as is compatible with clearness. For word-pictures stand at this disadvantage when compared with painted pictures: the one, that is the word picture, must be built up before the mind piece by piece; the other flashes upon the sight all at once. The building-up, then, should as a rule be done quickly; and, to be done quickly, as few words as possible should be used. Nouns, therefore, which include the characteristics of their correspondent objects, should be always chosen in preference to those which require adjectives.

In the judicious use of epithets may be discovered the secret power and pointedness of some of the finest writing in the language, just as in their too copious and free use may be traced the dribbling style, and want of effectiveness, of a great deal of what passes for pompous and sensuous style. If epithets are needed to bring out the sense, it is a proof that the nouns they qualify are wanting in definitiveness. If they are not needed to bring out the sense, but are added to express more fully what is stated in the context, or is so implied as to be immediately deducible from it, the style is loaded with verbiage, and the mental activity of the reader is repressed.

It is generally thought that poetry admits, and even requires, greater license in this respect that prose. And this is true. But even in poetry epithets that add nothing to the completeness of the picture detract from its impressiveness.

That there may be the sublimest poetry with few epithets may be shown from the study of the "Inferno" of Dante, or from the "Samson Agonistes" and "Paradise Regained" of Milton; and, to conclude with one selection from Shakespeare, it may be shown how admirable descriptive language may be without a too free use of adjectives:

"The lunatic, the lover, and the poet, Are of imagination all compact; One sees more devils than vast hell can holdThat is the madman: the lover, all as frantic,
Sees Helen's beauty in a brow of Egypt;
The poet's eye, in a fine frenzy rolling,
Doth glance from heaven to earth, from earth to heaven;
And, as imagination bodies forth
The forms of things unknown, the poet's pen
Turns them to shapes, and gives to airy nothing
A local habitation and a name."

My object in giving these final extracts is to show that, while adjectives used redundantly may, in certain cases, beautify the composition, equally adequate description is to be obtained by the skilful use of nouns which do not require adjectives.

And my concluding deduction is this: that in commencing a composition the writer should first ask himself the purpose of it. Having ascertained that, he should use his adjectives accordingly. If he desire to suggest more than he has room to say, let him make use of such adjectives as are capable of being endued with the noun-power. If he desire to throw an external light upon his picture, let him edge in an adjective or two which will awaken in the reader a passing memory of some other scene, or land, or age. But if his object be faithful, terse, vivid, powerful description, let him avoid adjectives as he would physic, using them only when there is absolutely no help for it. Let him search diligently for nouns that express his meaning without extraneous aid.—John Proffatt, in Appletons' Journal.

NEW BLACKBOARD EXERCISE IN GEOGRAPHY.

Let a pupil write on the blackboard the name California, for example. Now let another, with a wand, point out those letters of this name which spell the name of a city in Egypt (Cairo). Let another point out the letters which spell a cape of Massachusetts. Let others pick out the letters which spell a country of Africa; a grand division of the globe; a city in Peru; a river in South America; and a lake in Asia. Let the name Pennsylvania be written on the

blackboard. Point out the letters which spell a river of Africa; a country of Europe; a city of Massachusetts; a river of Asia: a river of France: and a capital of Europe. Write the name Sacramento. Point out the letters which spell the names of cities in Italy, in Nevada, in Michigan, and in France; of countries in Africa, and Asia; and of rivers in Maine and France. Write Washington. Point out the letters which form the name of a peak in California; of a river in Vermont; of a grand division; and of two of the United States. In the name San Francisco may be found the letters which spell a city of South America; a city of the Barbary States; and a city of Peru. Yangtse Kiang furnishes letters to spell a city of New York; a western State: a grand division; and rivers in New York, in Tennessee, and in Hindostan. And the name Montpelier yields enough of the alphabet to spell a river of Italy; a city of Portugal; and lakes in Ireland and the United States.

C. R. CLARKE.

FEMALE EDUCATION.

SECOND PART.

H AVING shown how the present race of mothers are educated, and what results follow from the existing condition of their education, I shall now dwell upon the plan for improving this condition. Before any thing effective can be accomplished, a giant must be overcome. This giant is Fashion. So long as parents believe that the present plan of education for girls is fashionable, so long will the teaching remain as it is. The only way to overcome this powerful idol is to induce intelligent parents to take the lead in starting and in practically carrying out a true system of education for their daughters. Acknowledging that such a plan is necessary, and confessing a belief that a sound education will not be able of itself and single handed to work its way, is no doubt a sign of weakness; but it is useless to ignore facts. While the present fashionable idea of girls' education is in vogue the development of good schools, even if started,

will be tedious and unsatisfactory, as this one great barrier to progress, which is met everywhere, will still be unremoved.

The work of educating a girl must necessarily be so framed as to be capable of developing into several very different conditions, although these conditions cannot be known at the time the education is begun, or perhaps till after the school period of it is completed. Taking, then, a girl of twelve or thirteen years of age, whose instruction has been conducted on the present fashionable plan, it may be presumed that she can read, write, and know a little of arithmetic, music and needlework, together with a smattering of a few other subjects, ranging with the quality of the school in which she has been a pupil. The real work of education has now to begin, and, in ninety-nine cases out of a hundred. this consists of superficial polish, or "finish." As a rule this polish is a very dangerous advantage. In the material world it is easier to test the workmanship of an article before this polish is laid on, and it is very much the same with education. A girl's mind at twelve expands rapidly and is very susceptible to impressions. The sham of show and superficial accomplishments, however, is very soon learned. The shallowness of the "examination" and "exhibition days" is evident to the pupils; and if their teachers display such hollow principles, it is not surprising if the girls themselves imitate them, and gain the idea that superficial attainments will always pass current as they do at school.

A difference which seems to exist between boys' and girls' education is that with girls the extent of the instruction and the subjects which may be embraced vary more with the age and not so much with the after occupation of the girl. A boy at thirteen or fourteen must undergo a very different course of training, whether he be intended for a lawyer or a merchant, a doctor or a clergyman. With girls, however, the subjects vary as to the number of years which each can devote to study. It is, of course, not expected that all girls should be treated alike, or that one is not naturally more advanced at twelve than another is at fourteen years of age; but, as a general principle, all girls have more or less one great function to prepare for, and that is to be qualified to

direct the household and train the mind. I leave out entirely, in these observations, that higher duty in the political field which some women think the goal of female attainments. I am not writing for them, nor in their interest, but rather in relation to the nobler aspects of the "woman question," as I view it. Their training must be such that should they remain unmarried they will still find themselves fitted for their duties, or should they be required to earn their livelihood they may be prepared.

The subjects of instruction for girls who are kept at school after the age of thirteen should be carefully arranged. Up to that age the instruction should differ but little from that given to children of both sexes, except perhaps that instrumental music may be taught, and some other subjects not so

much insisted on.

Animal physiology should certainly be taught to all girls of thirteen. The elementary laws which regulate the human body, the functions of the various parts, the precautions and habits which tend to promote health, and a knowledge of the causes detrimental to full vigor of body and mind, are important to all girls, and are most interest-

ing when properly taught.

Natural history and botany should be among the regular subjects of instruction, and considerable knowledge should be imparted to those who pursue their education until seventeen or eighteen years of age. For interest and practical use such studies cannot be too highly estimated. What mother cannot recall questions from her children concerning the uses of animals and the functions of different specimens both of the animate and inanimate world? Nothing, perhaps, would afford mothers a wider field for advancing their children's education than the scope of natural history and botany. Children never weary of hearing about the habits and uses of animals. Their cats, their dogs, their pigeons, or their rabits, afford endless variety of topics; nor do they enjoy any thing more than gathering wild flowers, and hearing about the way they grow and what their uses are.

All this they may learn, not through a given lesson, but by an agreeable conversation during a pleasant ramble. Each truth they gather from a skillful instructor, concerning such things, interests them as much as a well told story.

Drawing should receive attention; but the elementary work of free-hand outline, perspective, and easy examples of light and shade must first be attempted and successfully mastered, though the pupils may not make showy specimens for home inspection and admiration. When girls are older, if they have the time to devote to this practical accomplishment, they can then pursue it with advantage as an intellectual amusement, or as a means of livelihood.

Arithmetic, by some considered almost beneath the notice of young ladies, is an essential for a house-keeper. Such a question as the price of tea per pound when composed of a mixture of three-quarters of a pound of Congou at \$1.37\frac{1}{2}\$ a pound and one-quarter of a pound of Pekoe at \$1.18\frac{3}{4}\$ a pound, would puzzle, it is feared, half the matrons in the country.

The study of geography and history should not be omitted. The former, in its physical aspect, may be made to give the mind food to work upon and explain topics of interest met with in every day experience. History, in its political, social, and general bearing, may, as the ages of the pupils increase, be introduced with advantage. Girls, with this preparation, will be able to read with profit a variety of books otherwise repulsively dry.

In all subjects of mental instruction, with girls perhaps even more than with boys, the plan of associating experiment and visible illustration should, in all cases, be introduced.

Many girls, though in no way deficient in intelligence, are yet often slow to follow abstract reasoning or to trace the sequence of logical facts, unless interspersed with illustrations, and carefully exemplified step by step.

To the absence of instruction in logical reasoning may be attributed the great difficulty of comprehending a chain of argument, and of accepting a conclusion in a discussion, even though each step, as it followed in regular order, may have been acknowledged.

The physical training of girls is generally capable of great improvement. Dancing is almost always taught, and is con-

sidered so necessary by parents that an extra fee for it can generally be obtained without much difficulty. With this accomplishment few would wish to interfere, but it would be highly desirable, in all cases where this is not already done, to append to it drill and gymnastic exercise. Both of these may be made to benefit the constitution and general bearing of girls, though they must be judiciously superintended by a teacher, and the duration and description of

exercise carefully suited to each pupil.

As regards the efficient teaching of needle-work, cooking and other feminine occupations, much was said in the previous article. Such subjects, though not strictly educational, are yet part of the instruction which every girl should receive, and without which she must necessarily be more or less disqualified for her duties in after life. Much greater proficiency is required in these branches. Cooking is rarely, if ever, taught; and though difficulties certainly exist in carrying out practical instruction, yet its evident use to all girls who hope to become accomplished house-keepers—and what sensible American girl does not so hope?—renders it most desirable that steps should be taken to supply this deficiency.

The general idea which I wish to convey by these remarks is the necessity for the complete abolition of all the superficial work now done in the schools of which I have been speaking. The endless piano-playing, the smattering of French, Italian, drawing; the useless fancy work, and other "elegant accomplishments," as they are usually taught, can not be looked upon as education. No one would wish to dispose of the elegant accomplishments of which I have spoken, but surely they should not be made the foundation of education.

A girl trained in the elementary laws of physiology, natural history, and botany, in addition to being really grounded in the more ordinary subjects now so often but nominally taught at school, would, at sixteen or seventeen years of age, be really in such a position that, come what might, she would be prepared for it. After leaving school, or giving up her private masters at home, she would be qualified to pursue her education by herself; and this is a most

important consideration. As at present brought up, very few girls ever think of doing this, nor are they competent to make the attempt, even if they have the inclination. Those who married early would be fitted for training their families and for the various other duties of society. Those whose lot it was to remain single would have occupations to fall back upon, and means of profitably and intellectually employing their time for their own, as well as for their neighbors' benefit.

The proper and efficient education of girls, it must be urged, is not only a matter of private importance, but it is really one that affects, to a very great extent, the national well being. The nation is made up of a number of units, and these units each and every one of them, are immensely influenced by the training and rearing of their mothers—to say nothing of the influence which sisters have on one another and on their brothers. Much has been done by the great and meritorious common school system of the country in this direction, but it is unfortunately the fact that these schools have little influence on the final training of what may be termed well-to-do American girls. Fashion decrees that they must be sent to "a finishing establishment," and here, as a rule, they are polished off, so to speak, with rougé and powder. Against this pernicious practice no time should be lost in awakening public opinion. We should have a completely new and improved system of providing for the efficient education of girls. I shall be rejoiced if what I have written conduces to this end.

THE phrase "too thin"—generally regarded as slang—has a very high authority. In act 5, scene 2, of Henry VIII, the Monarch retorts as follows to the fulsome adulations of the Bishop of Winchester:—

[&]quot;You were ever good at sudden commendations, Bishop of Winchester. But know I come not To hear such flattery now, and in my presence They are too thin and base to hide offences."

HOW COMMON WINDOW GLASS IS MADE.

I F you ever visit Pittsburg, in Pennsylvania, you must go into the window-glass factories there; you will find them very curious. Their furnace, in the first place, is built in the ancient style; it has no chimney, and the smoke from the bituminous coal they burn, pours out in a cloud into the room. There are openings in the roof for it to escape through, and a continual draft of air from the doors carries it upward, so that it is not so bad for the workmen as one would think. Besides, they do not begin to blow until the smoke is all burnt off.

There are five pots on each side of the furnace; and you will see five men in a row, blowing all at once, with the regularity of a file of soldiers exercising. Each gathers thirty or forty pounds of metal on his pipe, which is very long and strong. They stand on platforms, to get room to swing the glass, as they blow it. The five men begin to blow and swing all together. Each blows a great globe of glass, which is stretched out gradually by the swinging motion into a cylinder, or roller, as it is called, five feet long. Then the five rollers are swung up towards the furnace holes, and five other soldiers spring forward with their guns-which in this case are iron bars that they set upright under the five blowing pipes to support them while the rollers are being reheated in the necks of the pots. The blowers blow in the necks of the pipes with all their might, then clap their thumbs over the holes to prevent the air from rushing out again; in the meantime the end of the roller is softened, so that at last the air, forced in and expanded by the heat, bursts it outward. The glass is then a cylinder, open at one end. It is whirled in the heat until the edges become true, then brought away—the five iron supporters dropping to the ground with a simultaneous clang. The cylinders are laid on tables, where the imperfect spherical end about the blowing pipe is cracked off from the rest by a strip of melted glass drawn around it. The cylinder is then cracked from end to end on one side by means of a red-hot iron passed through it.

In the adjoining building is what is called the flattening oven. The cylinders brought there are lifted on the end of a lever, passed in through a circular opening just large enough to admit them, and laid on flattening stones on the oven bottom, with the crack uppermost. The oven bottom is circular, and it revolves horizontally. As the glass softens it separates at the crack, and lays itself down gently and gradually on the stone. The long cylinder is then a flat sheet, three feet wide and nearly five feet in length. There are four openings around the sides of the oven; at one the glass is put in, through another a workman sweeps a stone for it, a third workman smoothes it down with a block as it comes round to him, and a fourth, at the last opening, which is close to the one at which it was put in, lifts the sheetpartly cooled by this time-upon a carriage in the oven. This he does by means of a lever furnished with sharp, broad blades at the end, which he works in under the glass. When the carriage is full it is run through an annealing oven beyond.

The opposite end of the annealing oven opens into the cutting room. There carriages are pushed along a central track, and unloaded at the stalls of the cutters. The cutter has a table before him, with measure marks on its edges. He lifts one of the sheets, lays it on a table, and commences ruling it faster than a school boy rules his slate. His ruler is a wooden rod five feet long, and his pencil point is a diamond. Every stroke is cut. Not that it cuts the glass quite apart; indeed he seems scarcely to make a scratch. Yet that scratch has the effect of cracking the glass quite through, so that it breaks clean off at the slightest pressure. In this way the sheets are put up into panes of the required size.

I remember one workman told me that a single diamond would last him two or three years. It has fifteen or sixteen different edges, and when one edge is worn he uses another. South American diamonds, such as he used, cost, he told me, from six to thirty dollars each; and when they are worn out for his purposes, he sells them for jewels to be put in watches.

GEOGRAPHICAL NOTES.

NITED STATES.—Clement Powell, a companion of Major Powell in the exploration of the Colorado River, writes to the Chicago Tribune (issue of January 20) a letter dated Oct. 10, 1871, at House Rock Springs, Arizona Territory. The diary is continued from Sept. 24, when the voyagers were in the midst of Cataract Cañon, 40 miles long, from which they passed successfully through Mille Crag Bend, five miles, Narrow Cañon, seven miles, full of sulphur springs and ending at Dirty Devil's River, whence there remained a course of 145 miles to the Crossing of the Fathers (El Vado de los Padres), on the line between Utah and Arizona. This was divided into Mound Cañon, ending at the River San Juan, and Monument Cañon. At the Crossing, the party renewed its supplies of all kinds, including photographic, for lack of which, after leaving Dirty Devil's River, no views could be taken. Major Powell and his assistant returned to Salt Lake City. The rest of the expedition, after a fortnight's rest, were to push on for Patona River, 45 miles below-a two weeks' journey, unlike that just achieved with a current running at a mile an hour. The homeward trip will not be begun till September of the present year. In Cataract Cañon the walls tower 3,000 feet above the water-level.

"We see the sun rise over one bank at 8 o'clock in the morning, and disappear over the other at 3 P.M. Looking upward, a slender patch of blue sky shows through the narrow cutting, thickly sprinkled with stars at night. With this exception, the cliffs and river bound our daily views. At noon, the thermometer ranges from 90 to 94 degrees in the shade; nights and mornings are cool."

Further on, the mercury stood at 105 degrees in the shade at midday, and in Mille Crag Bend at 100 degrees at 2 P. M. In the limestone walls of these canons, caves of various sizes are frequent and afford shelter from the weather. The finest met with was Music Temple, two miles below River San Juan, in Monument Canon:

[&]quot;It is a vast amphitheatre, cut by the water from the soft rock, and lighted by a narrow skylight, worn by a little stream working busily through the ages. At the entrance, four tall and slender cotton-

woods stand. Following a winding gorge, we turn a corner, and gaze admiringly at this freak of the floods. A vaulted roof stands over a spacious hall 320 by 520 feet in width and length, a floor of gravel, and, at the further end, a pool of water."

In the lower part of Mound Cañon, so named from the rounding summits of the cliffs,

"The river wends tortuously between high walls of orange-tinted stone, checkered here and there with broad bands of black, where the rains have stained them. This beautiful cañon abounds in miniature parks, lying between the two lines of cliffs [viz., the exterior 'mound' cliffs and the lower ones near the river], where trees and flowers cluster. Islands at intervals, and rapids."

"The walls of Monument Canon are nearly vertical, and are 1,500 feet high, cut through by many transverse and narrow canons. Giant statues, from 500 to 800 feet in height, rise from the river's boundary, and tower above the plateau beyond. On a straight stretch of river, this undulating line of peaks, with flanking sentinels, shows finely."

Some ruins of aboriginal houses and temples with traces of picture-writing were observed, and numerous relics in the shape of pottery, flints, etc. Four miles above the Crossing:

"The ancient Indians evidently got supplies of water at this point. Steps cut in the stone lead up the cañon wall, and in several places their rude records can still be traced on flat surfaces of rock about the stairway."

Two miners who met the party at House Rock Springs washed some of the sand shore for gold, and "soon obtained a few grains of the precious metal." They were certain that in the rapids "gold could be got by the handful."

—The Yale Exploring Expedition of 1871 returned in the middle of January, having made extraordinary collections of fossil remains and added not a little to our knowledge of the far-western territory. Led by Prof. O. C. Marsh, who had twelve assistants, graduates of Yale, it first examined the region along the Smoky Hill River, within a radius of fifty miles from Fort Wallace, which is near the Colorado frontier. Here tons of fossil remains were secured, embracing many new species of extinct birds, reptiles, and fishes, and huge skeletons ninety feet in length. The second region explored, using Fort Bridger as a base, was the tertiary lake basin drained by the Green River, in the

south-western corner of Wyoming, and the Uintah Mountains, just over the border, in Utah. Though 7000 feet above the sea, there was no lack of fossils, those of small animals being particularly abundant. The last trip was from Kelton, on the Pacific R. R., to Boise City in Idaho, via the Snake River and Shoshone Falls; thence down the John Day River to Canon City, in Oregon. In the canons in this vicinity the party was richly rewarded for its pains. The return was by way of the Columbia River and Portland. Prof. Marsh and some others, taking the steamer at San Francisco, were enabled to make collections on the Isthmus, and even to secure "some very valuable antiquities from the ruins of Central America." The expedition bore its own expenses, amounting to nearly \$15,000. (See Yale Courant, of Feb. 3.) A large number of fossil horses were discovered only two feet in height.

—The United States is invited to accept and complete the James River and Kanawha Canal, which now extends from Richmond to Buchanan—about forty miles from the West Virginia border. As a State enterprise it appears to be a failure, and the importance of connecting the Ohio River with tide-water is so obvious in a military as well as in a commercial point of view, that it may very properly be made a national undertaking.

—The Coast Survey Expedition under Mr. W. H. Dall, to explore the hydrography and natural history of Alaska, reached the harbor of Iliuliuk, Island of Unalashka, Sept. 23, 1871, in twenty-six days from San Francisco. A chart of the harbor was, Oct. 30, well under way. The temperature had averaged 44° Fahr.

—M. Octave Pavy, a young Frenchman, adventurous and wealthy, has conferred in St. Louis with Capt. Silas Bent, in regard to his theory of an open polar sea, and the natural gate to it, through Behring's Straits, which was fully set forth in the *Missouri Republican* of Jan. 7. An apparent disciple of Capt. Bent, M. Pavy leaves San Francisco this spring for Petrozavodsk (qu. Petropaulovski?). After sailing through the Straits, he will make for land lying between

71 and 80 degrees of latitude, which he will cross on sledges, and then launch a rubber raft that cannot be upset, and which he expects to freight with five men, 100 reindeer, 40 dogs, etc., with provisions for six months. All this, provided the open sea lies beyond the land in question. He will then steer for Greenland or Spitzbergen. He will perhaps meet in this voyage Prof. Nordensköld, of Stockholm, who is preparing to sail for Spitzbergen and the islands beyond, of which the northernmost is in lat. 80° 42'. On one of these he expects to winter in a house he takes with him in sections, and to resume operations in the spring of 1873. Last year, this explorer traveled extensively in Greenland.

WEST INDIES.—In the new cemetery at Havana, a grand monument is to be erected in honor of Columbus, to which his remains will then be transferred from the Cathedral in which they now lie.

South America.—Numerous railroad enterprises are in progress or contemplated in Brazil, with the object of unifying its southern tier of provinces and promoting immigration. The government is also favoring a line to connect the Amazon via the Madeira with Bolivia, while Peru, on the other hand, is constructing a road from the port of Islav via Arequipa to Puno, on Lake Titicaca, and the Argentine Republic is asked to subsidize a narrow-gauge road up the valley of the Pilcomayo, starting from Villa Occidental on the river Paraguay, which would bring the silver mines of Potosi within four days of Buenos Ayres. The Brazilian scheme is in the hands of Mr. George E. Church, an American engineer, and requires 170 miles of rail. The Peruvian road has been contracted for by Mr. Harry Meiggs, also an American, and is completed from the coast to Arequipa, 100 miles, the remaining distance being 220-the greatest elevation on the latter section being 14,600 feet above sea level, and the cuts and "fills" being very heavy. An engineer on the Arequipa end of this section writes: "A more desolate, barren waste than that through which we are now locating could scarcely be conceived, and the climate is the worst I have ever experienced. The nights are extremely cold, and during the day we have a wind that cuts the skin off your nose, lips and cheeks as effectively as if it had been done with a keen razor." The Argentine road was projected by Mr. Edward A. Hopkins, a Vermonter, long resident in South America, and is estimated at 285 geographical miles.

—Oran, in the province of Jujuy, on the Bolivian frontier of the Argentine Republic, was destroyed by an earthquake lasting nine hours, Oct. 22, 1871. But one life was lost, the inhabitants having fled to the open country. The ruin of the town was complete in ten minutes, but no less than forty shocks occurred before the earthquake ceased.

AFRICA.—More Herald dispatches from its Livingstone expedition. Mr. Herbert M. Stanley, according to advices from Zanzibar, Dec. 16, 1871, which reached London Feb. 12, left Unyanyembe on the 30th of August for Ogara, a twenty days' march, and arrived in good health, having accomplished half the distance to Ujiji. Dec. 8, there was a rumor at Zanzibar, not credited, of Mr. Stanley's death. The London Relief Expedition left in February for Zanzibar, via the Suez Canal, Mr. W. O. Livingstone, the explorer's son, being of the party.

——Since Sir Roderick Murchison predicted, from geological analogy, the discovery of gold in Australia, science has not been credited with any similar "practical" achievement. Cap. Richard F. Burton, however, whose long-delayed work on Zanzibar is announced below, writes to the Athenæum of Jan. 20, that he was in Brazil in 1867, and visited the Itacolumite regions of Minas Geraes and the Diamantine country in early July:

"Until then," says he, "it had been the general belief that diamonds were confined to a zone bounded by lat. (north or south) 15°-2°, the sole recognized exceptions being the equatorial diggings of Borneo and Malacca. The aspect of Minas Geraes at once assured me that the precious stone, so far from being limited to that area, would be found scattered over many parts of the world, and, in writing the 'Highlands of the Brazil' (vol. 2, vi., p. 80), I had hoped to announce the theory to a practical public. Unfortunately my absence in Paraguay and other parts of South America delayed the printing of the book, and Messrs. Tinsley were unable to bring it out before December 17, 1868. Meanwhile the diamond had been discovered at some fifteen places in California, in Australia, and north of the Cape, and announced by the Meibourne Argus and the Colesburg Aavertiser.

Pretending to little more of science than what is known to the majority of educated Englishmen, I have therefore, if the analogy be correct, performed a great feat of induction without ever being aware of its being a feat, or without the slightest importance being attached to it by myself or others."

OCEANICA.—In December, 1871, a telegraph cable was laid between Java and Australia. The Australian governments proposed to "charter" a steamer to convey dispatches from the terminus, Port Darwin, to Normantown, pending the completion of the overland line.

—An expedition to explore New Guinea was to leave Australia early this year. This comparatively unknown island, recently ceded by the Dutch to Great Britain, has already been invaded by the missionaries, who have been well received by the natives. Rev. Messrs. Murray and Macfarlane, the pioneers, were sent out by the London Missionary Society. They report:

"We were much pleased with the appearance of the people of these islands. They are genuine Papuans, dark colored, their hair slightly curled, tall and well proportioned, some of them having very good features. Many are as much as five feet ten inches in hight, and muscular in proportion. They do not wear any clothing, and but few ornaments; nor do they seem to use paint, as do the natives of New Hebrides and other dark races."

Asia.—Intelligence reached St. Petersburg, Jan. 28, of the total destruction the day before, by earthquake, of Shamaka (whether the new or old town of that name, is not clear), 75 miles west of Bakoo, in Transcaucasia, on the Caspian. The shocks were very protracted, and many lives were lost.

—Dr. Gustav Radde, director of the Natural History Museum at Tiflis, returned in December from an interesting journey of three months to the head waters of the Euphrates. Early in August, in company with Dr. Siewers, a young geologist, he ascended the Great Ararat, and reached an altitude of 14,233 feet above the sea level. Their botanical collections were especially rich.

—Telegraphic communication between Nagasaki and Europe through Siberia via Vladivostock, was established in November. The promptness with which the Japanese

avail themselves of the telegraph was shown on a recent occasion when an American named Rogers, accused of forging and uttering Kinsats, left the country and went to Shanghai. As soon as this became known they telegraphed to their representative in that city, who applied to the American consulate to have the man arrested on his arrival. The steamer was searched in vain, but Rogers was subsequently discovered ashore under an assumed name and remanded.

The political and social revolution in Japan is so rapid that it is difficult to keep pace with it. Here is an account, from the Japan Herald, of a class that will soon pass out of mind:

"Some half year or more ago the Yetas—the pariahs of Japan, and the only caste in the country—petitioned the government to have their disabilities removed, and to be admitted to participate in the common privileges of the land. We printed a translation of the petitions of the p tion of these people at the time, and urged its prayer to the favorable consideration of the government. It is gratifying to learn from a proclamation just issued by the Mikado, that this objectionable and proclamation just issued by the Mikado, that this objectionable and objectless class distinction has, after existing for centuries, been at length abolished. According to the census, the *Yetas* numbered in all no less than 460,000 persons. The origin of the distinction that was made with regard to this section of the inhabitants is lost in the mists of obscurity. Vague tradition asserts that they have descended from captives made in war, in the Corea, or were possibly derived from the aboriginal race of Japan. Perhaps Buddhism may have had its influence in isolating those adjudged impure from their unclean avocations, such as tanners, etc., until finally they constituted a separate and separated class, and were treated with such aversion that rate and separated class, and were treated with such aversion that they were prevented from engaging in ordinary business; they were deprived of public rights, and were compelled to live in villages exclusively appropriated to them, constituting a despised and oppressed class. Nevertheless, in process of time, by the pursuit of such industrial avocations as were permitted them, some became very wealthy, and by possessing themselves of education, which the dominant classes were powerless to prevent, raised themselves, within their own circles, in the social scale. In their personal appearance there is nothing physically peculiar to mark their belonging to a degraded class, and now their admission into general society is no longer vetoed, they will soon become merged into the general population of these islands.

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Cartography.—Maps of Yellowstone lake, Wyoming Territory, and of the region set apart by Congress for a National Park. U. S. Geological Survey of the Territories; F. V. HAYDEN in charge. Washington, 1872.

[—]We are glad to hear that Prof. Vambéry has nearly finished the history of Bokhara and Transoxania, founded on Oriental manuscripts brought from Central Asia, partly by the author himself, partly by the late Sir Alexander Burnes, and other recent travelers.

It begins at the Ante-Islamite period, and finishes with the Russian conquest of Samarkand.—Athenæum, Dec. 23, 1871.

—The editorship of the well-known geographical paper, Auslana, has passed into the hands of Mr. Frederic von Hellwald, who by various writings in the field of physical and political geography, such as Die Zuydersee, Die Russen in Centralasien, and others, has deservedly gained the reputation of an accomplished scholar.—Ibid.

—Works of travel and geographical research published in England in 1871, amounted, according to the *Publishers Circular* for Dec. 30, to 233. Of these 27 were American importations; 62 were new editions; and 144 were wholly new works, many of them, however, translations. The *Circular* selects the following as the most notable: Hare's Walks in Rome; Tollemache's Spanish Towns and Pictures; Leslie Stephen's Play Ground of Europe; Buchanan's Land of Lorne; Oxenden's First Year in Canada; Russell's Pau and Pyrenees; Raymond's Mines of the Rocky Mountains; Herbert Barry's Russia in 1870; Stanley's New Sea and Old Land; Elliott's Mysore; Guinnard's Patagonians; Mrs. Harvey's Turkish Harems; Macleod's Peeps at the Far East; Huyshe's Red River Exploration; Kingsley's At Last (West Indies); Tyndall's Hours in the Alps; Campbell's How to See Norway; Bowring's Eastern Experiences; Harcourt's Himmalayan Districts of Kooloo; Brown's Coalfields of Cape Breton; Ogier's The Fortunate Isles; Shaw's High Tartary; Murray's Handbook of Asia.

Obituary.—October 10, 1871, in Nicaragua, of fever, Dr. BERTHOLD SEEMANN, a most enterprising traveler and naturalist. Born at Hanover in 825, Dr. Seemann was, in 1846, appointed naturalist to H.M.S. Herald, in its survey of the Pacific, during which voyage he had the opportunity of exploring, more thoroughly than almost any other European, the Pacific countries of South America and the Isthmus of Panama. In the same vessel he subsequently visited the Arctic regions, and the "Narrative of the Voyage of H M.S. Herald," by Sir John Richardson and Dr. Seemann, is an important contribution to the natural history of previously little-known regions, the portion contributed by the latter comprising an account of the flora of Western Eskimo-land, north-western Mexico, the Isthmus of Panama, and the island of Hong-Kong. In 1860 he was sent by the English Government to the Fiji Islands, then lately acquired, and on his return published two works, one, "Viti," containing a narrative of his mission, the other, under the title of "Flora Vitiensis," a history of the vegetable productions of the islands. Since 1864, he has been greatly interested in the mining capabilities and other resources of the various states of Central America, and has spent much of his time there in the interest of different trading communities, and in promoting the route across the Isthmus. To this part of his experience we owe his work called "Dottings on the Roadside in Panama, Nicarauga, Mosquito." Dr. Seemann is the author of several popular botanical works in German and English, and has been since its foundation, Editor of the Journal of Botany, British and Foreign. His successor at that post is Dr. Trimen, of the British Museum.—Nature, Dec. 21 and 28, and Athenæum, Dec. 23, 1871.

[—]Capt. John Wood, of the Indian Army, who died near the close of 1871, discovered the source of the Oxus in 1838, for which he received the gold medal of the Royal Geographical Society.

COMPULSORY EDUCATION.

THERE is no doubt that the time has arrived for the introduction of such laws throughout the country. During the first years of the national existence, and especially in New England and the States peopled from that region, there was so strong an impression among the common people, of the immense importance of a system of free instruction for all, that no laws or regulations were necessary to enforce it. Our ancestors were only too eager to secure mental training for themselves, and opportunities of education for their children. The public property in lands was, in many States, early set aside for purposes of school and college education; and the poorest farmers and laboring people often succeeded in obtaining for their families and descendants the best intellectual training which the country could then bestow.

But all this has greatly changed, in New England and other portions of the country. Owing to foreign immigration and to unequal distribution of wealth, large numbers of people have grown up without the rudiments even of common-school education. Thus, according to the report of 1871 of the National Commissioners of Education, there are in the New England States 195,963 persons over ten years of age who cannot write, and, therefore, are classed as "illiterates." In New York State the number reaches the astounding height of 241,152, of whom 10,639 are of the colored race. In Pennsylvania the number is 222,356; in Ohio, 173,172, and throughout the Union the population of the illiterates sums up the fearful amount of 5,660,074. In New York State the number of illiterate minors, between ten and twenty-one years, amounts to 42,405. In this city there are 62,238 persons over ten who cannot write, of whom 53,791 are of foreign birth. Of minors between ten and twenty-one, there are here 8,017 illiterates.

Now it must be manifest to the dullest mind, that a Republic like ours, resting on universal suffrage, is in the utmost danger from such a mass of ignorance at its foundation. That nearly six persons (5.7) in every one hundred in the Northern States should be uneducated, and thirty out

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of the hundred in the Southern, is certainly an alarming fact. From this dense, ignorant multitude of human beings proceed most of the crimes of the community; these are the tools of unprincipled politicians; these form "the dangerous classes" of the city. So strongly has this danger been felt, especially from the ignorant masses of the Southern States, both black and white, that Congress has organized a National Bureau of Education, and, for the first time in our history, is taking upon itself, to a limited degree, the care of education in the States. The law making appropriations of public lands for purposes of education, in proportion to the illiteracy of each State, will undoubtedly at some period be passed, and then encouragement will be given by the Federal Government to universal popular education. As long as five millions of our people cannot write, there is no wisdom in arguing against interference of the general Government in so vital a matter.

During the past two years, all intelligent Americans have been struck by the excellent discipline and immense, welldirected energy shown by the Prussian nation—plainly the results of the universal and enforced education of the peo-The leading Power of Europe evidently bases its strength on the law of Compulsory Education. Very earnest attention has been given in this country to the subject. Several States are approaching the adoption of such a law. California is reported to favor it, as well as Illinois. Massachusetts, Rhode Island, and Connecticut have begun compulsory education by their legislation on factory children, compelling parents to educate their children a certain number of hours each day. Even Great Britain is drawing near it by her late school acts, and must eventually pass such laws. In our own State, where, of all the free States, the greatest illiteracy exists, there has been much backwardness in this matter. But under the new movement for reform, our citizens must see where the root of all their troubles lies. The Tweeds and Halls and Sweenys of this city would never have won their amazing power but for those sixty thousand persons in this city who never read or write. It is this class and their associates who made these politicians what they were.

We need, in the interests of public order, of liberty, of property, for the sake of our own safety and the endurance of free institutions here, a strict and careful law which shall compel every minor to learn to read and write, under severe penalties, in case of disobedience. With such a law should be passed an act requiring school-masters and Boards of Education to open half-time schools, for those children who are compelled to be engaged in manual labor a portion of the day.—New York Times.

A GOOD LETTER ON HEALTH.

M. EDITOR,—I was talking with my friend, Prof. C., not long ago, when he said to me with some emphasis:

"Health is the grand requisite in a teacher."

"You consider it the first thing, the second thing, the third thing?"

"Yes, I do. Most of our teachers are diseased. Female teachers especially. They are all so," said he warmly.

I began to think of my own experience hygienically, and whether I really ought not to write it out and print it for the

benefit and encouragement of the fraternity.

Fifteen years ago I went to L— to take charge of a little school. I had been suffering with chills and fever until I was almost weary of life. It was the month of January when I began my labors, and the winter was one of uncommon severity. I was seized with a cold and a cough and a spitting of blood. Oh, what a dismal epoch in my life! How I sighed for the sunny south with its orange groves—

"The land of the cypress and myrtle."

It has since amused me to learn what an impression I made upon strangers. A gentleman, whom I afterwards knew well, has often said laughingly that he wondered what sour looking man that was who passed his house every day, and several ladies cried out against an old triend of mine and his

wife for taking in that "solemn" man as a boarder. I submit that chills, colds, coughs, blood-spitting and poverty, in addition to the apparent blighting of all one's hopes in life, authorize a man to be somewhat grim-visaged—if anything does.

Meanwhile I had procured quite a private apothecary's shop of bottles, among which somebody's sarsaparilla was conspicuous. My uncle, calling to see me one day, got a glimpse of these treasures, as I chanced to open a wardrobe door.

"Why, what is all that?" said he.

"My medicines," I answered, with a smile. He suggested that I should throw them all away, and I did so gradually, or I doubt whether I should have been here to-day to tell that or any other tale.

"Throw physic to the dogs,"

is a pretty good rule, though it has its exceptions. I have, a few times in my life, been greatly benefitted by a *little judicious medication* at the hands of skillful physicians.

As warm weather came on, I grew better, but in the summer vacation had another terrible attack of chills at a watering place to which I had repaired for the benefit of my health!

It was with considerable difficulty that I got back to L—, a month after the time for the autumnal session. Reaching my boarding-house about noon, I sank down exhausted upon a sofa in the parlor, and a commiserating female friend told my landlady that I was in a decline.

Rallying from this by the aid of a physician, I got along pretty well until winter came on. Then a pain in my side, and the remembrance of the preceding winter, caused me to do as N. P. Willis says he did; I put on my cap for a brown study. I thought particularly of one day of my boyhood in which I was trudging along merrily through the snow toward the grammar school, my bosom open absolutely to the skin. A gentleman said to me, "You will take your death of cold." "Oh, no," I replied, "I am as warm as I can be." But now I was shuddering at the approach of cold weather. The result of the brown study was that I must take my

chance of two things: I must be a decorous, staid, but sickly man, or a healthful boy.

My pupils were getting their skates in order. Said I, "Boys, if I had a pair of skates, I believe I would go out with you on the pond." "O do! Yes! We'll get you a pair of skates. We'll all throw in and buy you a pair."

I allowed them to do so, mentally reserving the right to

repay them at some other time.

So, out we went. I had grown rusty in the art, my skates were not put on tight enough—in a word, some one gave me a chase, and slip! down on the ice! roll over and over! Very undignified. But up and off again with more care, and that pain left my side not to return. I could take a full

breath without a pang.

Then came snow-balling, and foot-balling, town-ball and "cat." Blessed be the man who invented balls. Then incessant walking. My wife would say, "Oh, please, do not go out to-day, the weather is so bad;" but I had taken the bit in my teeth, and accordingly signified that death out of doors was as good as death in doors, and out I would sally. About three times in 365, I went out when I should have stayed in. The other 362 times it was best to brave the weather.

A word about diet. An old school physician, with no vegetarian tendencies, forbade my eating meat for a while, but allowed me eggs, milk, bread, butter and vegetables. Next he augmented the larder by the addition of mutton and poultry. Afterwards I added beef, and, in the course of time, ham, and now can manage anything edible except boiled and fried cabbage, molasses and sweet milk. Sweet milk may be nature's own food, but it disagrees with many persons. My eyes very slowly opened to the conviction that it did not agree with me, whether it ought to or not. I mention this in order to exhort all my readers to eat only what agrees with them individually, in spite of every rule or regulation, scientific or vulgar. Indeed, sensible physicians now give this advice. There is no accounting for digestive idiosyncrasies.

What has been the result of all this? Last year I had a school catalogue of more than two hundred pupils. With-

out physical health I could have done nothing. As it was I taught several branches myself; did the duties of financial agent, and in a large measure those of steward also; read, traveled, preached occasionally, attended to the correspondence of the institution, superintended repairs, heard reports from classes, and did whatever else was needful to be done. I have not gone into a decline; have not abandoned my calling to turn farmer, merchant, or mechanic; am not pale or dyspeptic; have not grown nervous and delicate; have supported my family comfortably; and hope to serve my generation for a good while to come.

Now, Mr. Editor, if our teachers will not overwork themselves, will not keep private apothecary shops on mantelpieces and in wardrobes, will take but little medicine and then on the advice of the most sensible and judicious physicians, will exercise suitably in the open air, will eat such food as agrees with them, and not mope and brood,—they can regain lost health, and live to a good old age in the

profession.

Take courage, then, brethren of the craft. Learn the laws of hygeia and obey them, and it will be well with you. But, as Dr. Franklin pithily says, "If you disobey Nature, she will rap your knuckles."

A PRINCIPAL.

MORE REVISION REQUISITE.

A CORRESPONDENT of the Evening Post cuts up the lexicographers in the following happy style:

"I see by the daily journals that a respectable Hebrew has taken exception to Webster and Worcester's use of the word 'Jew' as a verb, meaning 'to cheat' or 'to cheapen,' with such effect that the publishers of the dictionaries propose to modify the objectionable definition, or to omit it altogether. Encouraged by the success of the Protestant Hebrew, an 'American Catholic' demands that the publishers shall omit the word 'Jesuitical,' or change the definitions 'crafty, artful, deceitful,' etc., which are asserted to be as insulting to the Catholics as the Jew definitions are to

the Hebrews. Very well; but while these revisions are in order, they may as well be thorough; and as the representative of a family which is fully as large as Abraham's, at least before the promise that his seed should be as the sand on the sea shore (and a comparative census is even now challenged), I call the attention of the publishers of both Worcester and Webster to their definitive remarks upon Smith. A Smith, they say, is 'one who forges'-I think this is actionable-and they further define a Smith to be 'a worker in metals,' which is equally applicable to the manufacturer of counterfeit coin. If the sensitive feelings of the Jews and the Catholics are to be considered, surely the claims of the numerous and rapidly spreading sect of Smiths are not to be ignored; and I hereby call upon the publishers of the two dictionaries to modify or omit their insulting remarks about the Smiths. It may be added, too, that these dictionaries, recklessly regardless of recent legislation in Congress, make invidious distinctions between black Smiths and white Smiths, by no means in accordance with the advanced spirit of the times.

"216 Baxter street (rear).

J. SMITH."

"Mr. Smith" might have made appropriate mention of a certain enterprising school-book publisher of this city. Not many years ago he erased, from his popular spelling book, certain words, to please, as he hoped, the people of a section of our country.

Of course, if the ignorant and biased are permitted to meddle with our Dictionaries, their work will require frequent revisions. And at best such work will enjoy short life, and partisan glory.

The enlightened and conscientious lexicographer can have nothing to do with the passions of the hour, nor with the prejudices of a class, however large or influential.

A SINGLE sheet of paper was recently made at Cohoes, N. Y., forty-four inches wide and a fraction over twenty-five miles long, and the weight was 10,050 pounds.

EDUCATIONAL INTELLIGENCE.

WHEELING, W. VA.-Little more than twenty-three years have elapsed since the first establishment of public schools in the city of Wheeling. The Superintendent of Public Schools reports now as follows: Assessed valuation of real and personal property in the city, \$13,025,298.06; estimated true value of real and personal property in the city, \$30,000,000; estimated true value of all school property, real and personal, \$151,500; total enrollment in the schools during the year ending June 30, 1871, 3,450; average monthly enrollment in the schools during the year ending June 30, 1871, 2,333; number of teachers employed (including seven special of German), 65; amount paid for teachers' salaries, \$29,562.50; amount paid for all other school purposes, except permanent improvements, \$8,426.93; total cost of operating the schools for the year, \$37,989.43; cost, per pupil, for tuition (teachers' salaries,) based on average monthly enrollment, \$12.67; cost, per pupil, for all other objects, except permanent improvements, \$3.61; total cost, per pupil, \$16.28.

SCOTLAND.—Efforts are being made for the promotion of science and art instruction in Scotland. The local papers report a series of meetings in the large towns, which appear to have been fairly successful. Mr. Buckmaster has forcibly pointed out what is required in the education of working men, and their employers; instead of teaching boys abstractions and metaphysical ideas, as if they were all to be parish ministers, they must be taught things. A knowledge of the laws and properties of matter, by which the earth is subjugated to our use, is the proper education of men who have to work on matter. Several local committees have been appointed to coöperate with the Science and Art Department in promoting scientific instruction in Scotland.

TURKEY.—ROBERT COLLEGE, Constantinople, was founded in 1860, and opened in 1863. It has now become self-sustaining. Its students, now numbering 250, represent nearly all nationalities, but the majority are of Armenian,

Greek and Sclavonic races. Girls and women have applied for admission, and the project of admitting them is being agitated. Its President, Rev. Cyrus Hamlin, D.D., is now in this country, to raise funds with which to erect a new building, capable of accommodating at least 250 more students, houses for professors, and to procure an oriental library. He wants in all \$300,000.

JAPAN.—Hon. BIRDSEY G. NORTHROP, Secretary of the State Board of Education in Connecticut, has been invited by the representatives of the Japanese Government to go, at an early day, to Japan, and aid in the establishment of a system of popular instruction adapted to that empire. The work will probably occupy him, if he accepts, for a period of years, and will, as we understand it, include such duties as in many governments devolve upon a Minister of Public Education.

There is probably no one in this country better qualified than Mr. Northrop to undertake the task. He has been for many years in Massachusetts and Connecticut an official guardian and promoter of popular education. Intelligent, wise, indefatigable, self-forgetful, prompt, he has shown himself an excellent administrator of business. Enthusiastic, capable of enlisting the aid of all sorts of colleagues, ready in expedients, and of vigorous constitution, he is well fitted to endure the fatigues of an arduous post, and to secure the coöperation of all sorts of men. He has just come home from a tour of educational inquiry in England and on the Continent, which is an admirable preparation for the duties to which he is now called. We do not know whether he will accept the invitation; but we hope for the sake of Japan, and for the sake of universal education, that he will not decline it, except for the most imperative considerations.

It is very interesting to watch the progress of Japan in its study of and intercourse with the nations of the West. The minister of that country, now resident in Washington, Mr. Mori, is a man of English education, greatly interested in the progress of knowledge, earnest, and desirous of promoting the advancement of his country in all good things. By his intercourse with our official representatives, and by

his visits to different parts of the country, he has gained the confidence and esteem of many Americans. The young Japanese who are studying in Brooklyn, New Brunswick, New Haven, Monson, Norwich, and elsewhere, have acquitted themselves for the most part with exemplary diligence and success. One enthusiastic teacher writes us that if all the Japanese are like his scholars, he should like to move his school to Japan. The embassy now on its way, outranking the resident representative, is a special mark of progress and inquiry. The head of it, as we are told, is one of the highest officers of the government,-being one of two men who share the honors which among western nations pertain to the Prime Minister. Four officers of lower rank, and a considerable retinue, attend him. The coject of the embassy, it is supposed, is to bring an officer of high rank and prolonged experience, directly into contact with the governments of Christian nations. An adopted brother of the Mikado is now receiving instruction in an American school. Already one of the heads of departments in Washington, Gen. Capron, recently U. S. Commissioner of Agriculture, has been called to Japan to aid in the development of the material resources. Now latest, but we presume not last, of these indications of progress, comes this important summons to Secretary Northrop.—Christian Union.

CURRENT PUBLICATIONS.

I F we failed to notice Cathcart's Youth's Speaker¹ in our last issue, we have now the opportunity of saluting it as an assured success, rather than as a candidate for popular favor.

This appreciation is well merited, for it seems as though both publishers and author had conspired to make a gem of a book. In mechanical execution—in the details of paper and print and binding—the Speaker realizes all that is con-

¹ Selections in Prose, Poetry and Dialogues, for Dec'amation and Recitation. By G. R. CATH-CART. New York; Ivison, Blakeman & Co.

veyed by the word daintiness,—and we do not know that there is any other word which just conveys the impression

produced by this charming compilation.

And, as to the work of redaction itself, though it may seem a slight matter to put together a selection of pieces for exhibition-day, it is in fact no easy task, as they best know who have endeavored painfully to winnow from out the chaff of our ordinary speakers material just suited to the declamatory capacity of the younger class of scholars. Mr. Cathcart manifestly possesses that rarest gift, a seeing eye, and has been able—we know not whether by experience or by divinition—to discern just the style of piece which a youngster can utter with naturalness and spirit, and this for the very sufficient reason that the pieces are precisely of the kind which come into rapport with the youthful intellect and imagination.

In his modest preface the author states that "a boy will memorize more easily, and speak more naturally and forcibly a richly colored descriptive or didactic passage than an exercise of simple puerile construction." Nothing could be more just than this observation. Our Readers are entirely too much on the dead prosaic level. That which the young appreciate most vividly and intensely is eloquence,—and that which they love most they certainly will repeat

best.

We deem, therefore, that Mr. Cathcart has shown not only nice tact and taste in his selection, but a knowledge of human nature (that is *youthful* human nature) rare in bookcompilers. And hence we predict for the Speaker a continuation of its deserved success in even more abundant measure.

Mr. J. H. Zelle, Superintendent of Schools, Kingston, N. Y., has taken a step in the right direction in preparing "The Critical Speller." It is a collection of useful words which are most frequently misspelled. Words which the pupil will never be likely to have occasion to use, and all words so simple that he can scarcely misspell them if he tries, are omitted. This little book will tend to save valuable time for pupils, and hence its proper use should be encouraged.

We understand that Mr. T. W. T. CURTIS, Principal of the New Haven High School, has prepared a similar work, though more extended. New departures of this sort, to shorten the course of the student, by opening "short-cut roads" up the hill, will be approved by all concerned.

HAGAR'S MATHEMATICAL SERIES² sets out with, I "Primary Lessons in Numbers;" II "Elementary Arithmetic;" III "Common School Arithmetic." They are very tastefully illustrated, and introduce the object teaching method in a sensible and natural manner. Both authors' and Publishers' part disclose the work of master hands. In fact, they are the best looking arithmetics that we have seen.

Dr. John S. Hart's "Manual of English Literature" is just published, in the usual good style of Messrs. Eldredge & Brother.

Mr. J. R. Sypher has prepared a book entitled, "The Art of Teaching School." Its secondary objects are pretty fully set forth in its title page: "A manual of suggestions for the use of teachers and school authorities, superintendents, controllers, directors, trustees and patrons of public schools and higher institutions of learning. How to establish, organize, govern and teach schools of all grades, and what to teach." Why he fails to mention in this list, "school visitors and school commissioners," we do not know. If it is adapted to those enumerated, it must be good for them too. It is published by Messrs. J. M. Stoddart & Co.

MESSRS. G. T. PUTNAM & SONS have published a little volume in paper binding, called "The Best Reading." It gives hints on the selection of books, on the formation of libraries, on courses of reading, etc. It contains a classified bibliography for easy reference.

MESSRS. C. C. CHATFIELD & Co., have just issued "Logical Praxis," comprising a summary of the principles of logical science and copious exercises for practical application, by HENRY N. DAY.

Also, "Holy Land," with Glimpses of Europe and Egypt,

a Cowperthwait & Company, Publishers.

a year's tour, by S. D. PHELPS, author of "Poems for the Heart and Home."

MESSRS. HARPER & BROTHERS have published "Notes on the Corinthians, by Albert Barnes;" "Around the World," being sketches of travel through many lands and over many seas, by E. D. G. Prime, with illustrations; "Twenty Years Ago, a book for girls," by the author of "John Halifax, Gentleman;" "Poor Miss Finch," a novel by WILKIE COLLINS; and "Oliver Twist," of the Household Edition of the works of Charles Dickens—illustrated in their excellent style.

"The JOURNAL OF EDUCATION for the Province of Nova Scotia," for the month of February, is very good. It is made up from the columns of the AMERICAN EDUCATIONAL MONTHLY, and, strangely enough, the "credit" is neglected. To say the least, that seems pretty "cool," even for that latitude.

MISCELLANEA.

JOHN S. HART, LL.D., author of several popular School Books, and late Principal of the New Jersey State Normal School, has accepted a Professorship in the Collège of New Jersey.

PROF. GEORGE F. COMFORT, author of a popular German Series, has accepted the Professorship of Modern Languages and Æsthetics in Syracuse University, N. Y.

PROFESSOR CHARLES A. LEE died at Peekskill, N. Y., in February, aged seventy-two years.

MR. E. ARMITAGE, a distinguished English artist, is at work upon an allegorical painting, exemplifying the burning of Chicago, and the sympathy and generosity of England, which was called forth by the calamity. The painting is to be presented to the city of Chicago by English artists. Its size is to be, without frame, 12 feet long by 9 feet high. It is to be finished by August or September next.

WHEN the Grand Duke Alexis passed Godfrey, Ill., the young ladies of Monticello Seminary assembled at the station, waved their handkerchiefs in welcome, and sang in full chorus "My Country, 'tis of Thee, Sweet Land of Liberty." The Duke gracefully bowed his appreciation, and smiled his thanks and adieux.

The next Morning Miss Haskell, the Principal, received the following note: "Touched by the attention and delighted with the beautiful singing of the young ladies of your establishment, I beg to express my hearty thanks.

"ALEXIS."

This note, in the hand-writing of the Duke, will be fondly preserved in the Seminary cabinet.

HOSPITAL FOR FOOLS.—Some one writes that in Amsterdam there used to be a hospital for fools; but there was so much contention as to who should occupy it-so many ought to, and so few were willing to go there,-that the charitable enterprise was finally abandoned.

PUBLISHERS' DEPARTMENT.

Sheldon & Company have just issued some very important text-books. First, several of the higher books of the "Stoddard Mathematical Series." This important dard Mathematical Series." This important series is being completed by Prof. Olney, of Michigan University: the "Complete School Algebra," the "Elementary Geometry and Trigonometry" and the "General Geometry and Calculus" have been published, and have already been very successful. Although prepared by a Western Author, the "Calculus" was at once adopted in Harvard College, Yale and Brown University and many other of our best institutions. Prof. Olney has been very successful in making the most difficult part of mathematics clear to the comprehension of ordunary students. S. & Co. have also issued "Colton's New Series of Geographies." The distinguishing features of these books are: 1st. They contain all which the also issued "Colton's New Series of Geogra-phies." The distinguishing features of these books are: 1st. They contain all which the scholar should be required to learn, and nothing more. The too common practice of crowding School Geographies with all sorts of colateral matter, suited only for books of reference, has been carefully avoided. 2d. The clearness and beauty of the maps. The Capitals are all dis-tinguished by a peculiar style of type, as are the vaces next in importance by another special style tinguished by a peculiar style of type, as are the places next in importance by another special style of type. The Maps contain only the places which are questioned upon in the text, and they are so clearly represented that they can be found at a glance. 3d. The whole subject of Geography, as taught in common schools, is embraced in two books.

Alliteration.-The New Haven

A 111teration.—The New Haven Daily News, on receiving a copy of the Yale Naught-ical Almanac, thus alliterates:

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